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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,904	09/18/2003	Randy L. Schnepper	501323.01	7038

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EXAMINER	
PORTKA, GARY J	

ART UNIT	PAPER NUMBER
2188	

DATE MAILED: 03/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/665,904	SCHNEPPER, RANDY L.	
	Examiner	Art Unit	
	Gary J. Portka	2188	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 September 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-60* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-60* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *18 September 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *various*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-60 are presented for examination.

Information Disclosure Statement

2. In an attempt to fulfill Applicant's duty to disclose information which is material to patentability according to 37 CFR 1.56, Applicants have submitted a large number of documents for the Examiner to consider. However, it appears from a cursory review of the documents that the vast majority of them are not material to patentability and should not have been submitted. In fact, the sheer number of documents creates an undue burden on the Examiner since if each document is material to patentability, each document must be carefully considered.

According to MPEP 609 (emphasis added): "Although a concise explanation of the relevance of the information is not required for English language information, applicants are encouraged to provide a concise explanation of why the English-language information is being submitted and how it is understood to be relevant. Concise explanations (especially those which point out the relevant pages and lines) are helpful to the Office, particularly where documents are lengthy and complex and applicant is aware of a section that is highly relevant to patentability or where a large number of documents are submitted and applicant is aware that one or more are highly relevant to patentability."

Additionally, Applicant is made aware of the court decision in Penn Yan Boats, Inc. v. Sea Lark Boats, Inc., et al., 175 USPQ 260 (DC SFla, 1972) which stated that "Applicant has obligation to call most pertinent prior patent to attention of Patent Office

in a proper fashion and to attempt to patentably distinguish his claimed invention from disclosure of patent; failure to take these affirmative steps, particularly when coupled with misrepresentations made to the Patent Office, renders unenforceable the patent issued on his application." Apparently a good reference was buried in the mountain of prior art in the case and never pointed out by the Applicant.

Applicant is reminded that only documents which are "material to patentability" should be submitted. See 37 CFR 1.56 for definition of materiality.

Accordingly, none of the information disclosure statements has been considered. Applicant should submit a new IDS containing only those documents which are material to patentability, and Applicant should call Examiner's attention to particular passages and/or figures of particular documents. Resubmission of the previously submitted documents is not necessary.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-24 and 35-50 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1, 6, 13, 19, 35, 38, 43, and 47, and their dependent claims separately or by dependency, recite "high-speed" with regard to a bus or an interface. The scope of this limitation cannot be determined, making it indefinite.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 5-6, 10-11, 13, 17, 35, 38, 41-43, and 46 are rejected under 35 U.S.C. 102(e) as being anticipated by Langendorf et al., US 6,725,349 B2 (hereinafter "Langedorf").

7. As to claims 1, 5-6, 10-11, 13, 17, 35, 38, 41-43, and 46, Langendorf discloses a memory hub, sub-system, and module (see Abstract, Fig. 2) comprising high-speed interface for receiving memory access requests (at 205, 208, and 210), non-volatile memory having memory configuration information (BIOS), memory controller coupled to the above having registers into which the information is loaded, and operable in accordance therewith (at 300, Fig. 3, also see col. 2 lines 35-41, col. 5 lines 18-29 and 36-43).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 19-21, 23, 47-48, and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Langendorf, in view of Jeddeloh, US 6,947,050 B2 (hereinafter "Jeddeloh").

10. As to claims 19-21, 23, 47-48, and 50, Langendorf discloses the invention substantially as described above with regard to claims 1, etc. Langendorf does not disclose a system controller having system memory and peripheral device ports. However, Jeddeloh discloses such a system controller (154 in Fig. 2). The controller of Jeddeloh also enters configuration data into registers (see col. 7 lines 7-10). The two ports allow control and access to the memory from both the processor and peripheral devices (see col. 4 lines 38-58). Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to have a controller with memory and peripheral ports, because it was known to be desirable to provide memory access to/from the peripherals as well as the processor.

11. Claims 25-26, 28-33, 51-52, and 54-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Langendorf. Alternatively, claims 25-26, 28-33, 51-52, and 54-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Langendorf in view of Jeddeloh.

12. As to claims 25-26, 28-33, 51-52, and 54-58, Langendorf discloses the invention substantially as described above with regard to claims 1, etc. Langendorf does not disclose a plurality of non-volatile memories each copying to a respective memory controller. However, it would have been clearly obvious to an artisan to use the teachings of Langendorf in any number of instances; that is, the teaching is scalable.

For example, the teaching is applicable to each node of a system that has multiple nodes, where one node is equivalent to the Langendorf Fig. 1. Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to have plural non-volatile memories and respective plural memory controllers, because the teachings in Langendorf are applicable to any number of like systems.

13. Alternatively, Jeddeloh discloses a system having multiple processor and multiple memory controllers (Fig. 4) each having registers loaded from non-volatile memory. Each location from which configuration data is retrieved may be considered a non-volatile memory to the extent recited. Or it could be considered desirable to have multiple BIOS load multiple controllers since there are multiple processors and this would certainly initialize the controllers faster. Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to use multiple non-volatile memories to load multiple controllers, because this was taught by Jeddeloh, and would be the fastest way to initialize them.

14. Claims 2-3, 7-8, 14-15, 36, 39, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Langendorf et al., US 6,725,349 B2.

15. Claims 34 and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Langendorf, or over Langendorf in view of Jeddeloh.

16. As to claims 2-3, 7-8, 14-15, 34, 36, 39, 44, and 60, Langendorf does not disclose the non-volatile memory integrated with the controller. However, integration or relocation of elements absent any functional result is not generally afforded patentable weight, since such integration/relocation is obvious. Thus it would have been obvious to

one of ordinary skill in the art at the time of the invention to integrate the non-volatile memory and the controller, because was known to reduce size, complexity, and likely reduce cost and improve performance.

17. Claims 4, 9, 16, 37, 40 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Langendorf, in view of the admitted prior art.

18. Claims 22 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Langendorf and Jeddeloh, in view of the admitted prior art.

19. Claims 27 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Langendorf, in view of the admitted prior art, or alternatively over Langendorf and Jeddeloh, in view of the admitted prior art.

20. As to claims 4, 9, 16, 22, 27, 37, 40, 45, 49, and 53, Langendorf does not disclose the serial bus as recited. However, Applicant has admitted that such a bus was prior art (see pages 6-7 of the specification). An artisan would have been motivated to use a serial bus because of well known art advantages of reducing size and cost, as well as to utilize existing configurations using this bus. Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to use a serial bus, because they were well known to reduce size and cost, and were admitted as prior art.

21. Claims 12 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Langendorf, in view of Dodd et al., US 6,952,745 B1 (hereinafter "Dodd").

22. Claims 24 and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Langendorf and Jeddeloh, in view of Dodd.

23. As to claims 12, 18, and 24, Langendorf does not disclose the memory is SDRAM. However, such memory was well known, and was disclosed in a similar memory/controller device as taught by Dodd, see col. 2 line 34 to col. 3 line 25. It would have been obvious to one of ordinary skill in the art at the time of the invention to use SDRAM, because it was a widely known and used memory that can achieve improved performance, and was known in similar memory/controller systems.

24. As to claim 59, Langendorf does not disclose that the configuration loads capacity or clock speed. However, in a similar memory controller loading system, Dodd teaches to load a memory controller with memory characteristics stored in a non-volatile memory, including memory size (capacity) as well as other characteristics. It would have been obvious to one of ordinary skill in the art at the time of the invention to load capacity or clock speed, because it was known to be useful in similar memory/controller systems.

Conclusion

25. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Patent No:

6,859,856 Configuring flash controller using configuration table.

26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary J. Portka whose telephone number is (571) 272-4211. The examiner can normally be reached on M-F 9:30 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mano Padmanabhan can be reached on (571) 272-4210. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Gary J Portka
Primary Examiner
Art Unit 2188

March 14, 2006

GARY PORTKA
PRIMARY EXAMINER